

* need molar mass
Name _____ Date _____ Class _____

dimensional analysis → given? find?
10-2 Practice Problems

$$\text{given} \times \frac{\text{find units}}{\text{given units}}$$

1. Find the mass of 0.89 mol of CaCl_2 .

~~9.~~ Determine the number of atoms that are in 0.58 mol of Se.

2. A bottle of PbSO_4 contains 158.1 g of the compound. How many moles of PbSO_4 are in the bottle?

~~10.~~ How many moles of barium nitrate (BaNO_3) contain 6.80×10^{24} formula units?

3. Find the mass of 1.112 mol of HF.

~~11.~~ Determine the number of atoms that are in 1.25 mol of O_2 .

4. Determine the number of moles of C_5H_{12} that are in 362.8 g of the compound.

~~12.~~ How many moles of magnesium bromide (MgBr_2) contain 5.38×10^{24} formula units?

5. Find the mass of 0.159 mol of SiO_2 .

~~13.~~ Determine the number of formula units that are in 0.688 mol of AgNO_3 .

6. You are given 12.35 g of $\text{C}_4\text{H}_8\text{O}_2$. How many moles of the compound do you have?

~~14.~~ How many moles of ethane (C_2H_6) contain 8.46×10^{24} formula units?

7. Find the mass of 3.66 mol of N_2 .

~~15.~~ Determine the number of formula units that are in 1.48 mol of NaF.

8. A bottle of KMnO_4 contains 66.38 g of the compound. How many moles of KMnO_4 does it contain?

~~16.~~ How many formula units are in 3.5 g of NaOH?